

PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY


(Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)

REC'D 03 NOV 2005

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Applicant's or agent's file reference P03019	FOR FURTHER ACTION		See Form PCT/IPEA/416
International application No. PCT/NO2004/000211	International filing date (day/month/year) 08.07.2004	Priority date (day/month/year) 09.07.2003	
International Patent Classification (IPC) or national classification and IPC E21B43/36			
Applicant NORSK HYDRO ASA et al.			
<p>1. This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36.</p> <p>2. This REPORT consists of a total of 5 sheets, including this cover sheet.</p> <p>3. This report is also accompanied by ANNEXES, comprising:</p> <p>a. <input type="checkbox"/> sent to the applicant and to the International Bureau) a total of sheets, as follows:</p> <p><input type="checkbox"/> sheets of the description, claims and/or drawings which have been amended and are the basis of this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions).</p> <p><input type="checkbox"/> sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental Box.</p> <p>b. <input type="checkbox"/> (sent to the International Bureau only) a total of (indicate type and number of electronic carrier(s)) , containing a sequence listing and/or tables related thereto, in computer readable form only, as indicated in the Supplemental Box Relating to Sequence Listing (see Section 802 of the Administrative Instructions).</p>			
<p>4. This report contains indications relating to the following items:</p> <p><input checked="" type="checkbox"/> Box No. I Basis of the opinion</p> <p><input type="checkbox"/> Box No. II Priority</p> <p><input type="checkbox"/> Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability</p> <p><input type="checkbox"/> Box No. IV Lack of unity of invention</p> <p><input checked="" type="checkbox"/> Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement</p> <p><input type="checkbox"/> Box No. VI Certain documents cited</p> <p><input type="checkbox"/> Box No. VII Certain defects in the international application</p> <p><input type="checkbox"/> Box No. VIII Certain observations on the international application</p>			
Date of submission of the demand 21.01.2005		Date of completion of this report 02.11.2005	
Name and mailing address of the international preliminary examining authority:  European Patent Office D-80298 Munich Tel. +49 89 2399 - 0 Tx: 523656 epmu d Fax: +49 89 2399 - 4465		Authorized Officer Bellingacci, F Telephone No. +49 89 2399-2784	



**INTERNATIONAL PRELIMINARY REPORT
ON PATENTABILITY**

International application No.
PCT/NO2004/000211

Box No. I Basis of the report

1. With regard to the **language**, this report is based on the international application in the language in which it was filed, unless otherwise indicated under this item.
- ☐ This report is based on translations from the original language into the following language , which is the language of a translation furnished for the purposes of:
- ☐ international search (under Rules 12.3 and 23.1(b))
 - ☐ publication of the international application (under Rule 12.4)
 - ☐ international preliminary examination (under Rules 55.2 and/or 55.3)
2. With regard to the **elements*** of the international application, this report is based on *(replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report):*

Description, Pages

1-4 as published

Claims, Numbers

1-5 as published

Drawings, Sheets

1/2, 2/2 as published

☐ a sequence listing and/or any related table(s) - see Supplemental Box Relating to Sequence Listing

3. ☐ The amendments have resulted in the cancellation of:

- ☐ the description, pages
- ☐ the claims, Nos.
- ☐ the drawings, sheets/figs
- ☐ the sequence listing (*specify*):
- ☐ any table(s) related to sequence listing (*specify*):

4. ☐ This report has been established as if (some of) the amendments annexed to this report and listed below had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).

- ☐ the description, pages
- ☐ the claims, Nos.
- ☐ the drawings, sheets/figs
- ☐ the sequence listing (*specify*):
- ☐ any table(s) related to sequence listing (*specify*):

* If item 4 applies, some or all of these sheets may be marked "superseded."

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Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Yes: Claims	3
	No: Claims	1,2,4,5
Inventive step (IS)	Yes: Claims	
	No: Claims	1-5
Industrial applicability (IA)	Yes: Claims	1-5
	No: Claims	

2. Citations and explanations (Rule 70.7):

see separate sheet

Reference is made to the following document

D1 = WO 01/85297 A1

Re Item V

**Reasoned statement with regard to novelty, inventive step or industrial applicability;
citations and explanations supporting such statement**

V-1 D1, which is considered as the closest prior art, describes a pipe separator for separation of fluids, for example separation of oil, gas and water in connection with the extraction and production of oil and gas from formations under the sea bed (page 1, lines 29-32), comprising an extended, tubular separator body (1) that has a diameter at the inlet and outlet ends that is mainly equal to or slightly greater than the diameter of the transport pipe to which the separator body is connected (page 1, lines 5-7; page 9, lines 1-8; fig. 4), a separator device, expediently a cyclone, arranged upstream of the separator body for separation of any gas present (page 2, lines 14-17) and an electrostatic coalescer arranged in connection with the pipe separator, wherein the electrostatic coalescer is incorporated in and constitutes an integrated part of the separator body (fig. 2).

The subject-matter of claim 1 is therefore not new and the claim does not meet the corresponding requirement of Art. 33(3) PCT.

For completeness it is also pointed out that the presence of a gas separator (anyhow disclosed in D1) does not limit the scope of the claim, as it is not part of the "pipe separator" which is claimed.

V-2 Claims 2, 4 and 5 specify features of the cyclone which is not part of the device claimed in claim 1. The claims therefore do not add any further limitation to the subject of claim 1 (a pipe separator) and therefore they are also not new. Should claim 1 having been directed to the combination of a pipe separator and a cyclone then the subject-matter of claims 2, 4 and 5 would have been new but it would not have involved an inventive step, as the features of said claims are routinely used in gas separators.

V-3 It is apparent that under circumstances the use of two separators in series may become preferable, and therefore the subject-matter of claim 3 does not involve an

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inventive step.